DOCUMENT RESUME

ED 168 050 CS 204 755

AUTHOR Johnson, J. David; Tims, Albert R.
TITLE Magazine Evaluations and Levels of Readership: A Cross-Cultural Analysis.
PUB DATE Aug 78
NOTE 17p.; Paper presented at the Annual Meeting of the Association for Education in Journalism (61st, Seattle, Washington, August 13-16, 1978)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Attitudes; Cross Cultural Studies; Developing Nations; Foreign Countries; *Journalism; *Periodicals; *Reading Habits; Use Studies
IDENTIFIERS *Reader Response

ABSTRACT

Data from four separate studies in three developing nations that received magazines published by the International Communication Agency (formerly the United States Information Agency) were used to discover how important image is as a determinant of readership and to identify the relative importance of each image attribute. Respondents in each of the samples were administered the same set of 11 bipolar adjective scales. Evaluations of the first magazine, "Horizons," were gathered in Venezuela and in the Philippines, which allowed for the assessment of cross-cultural patterns in the evaluations. Evaluations of the second and third magazines, "Topic" and "Interlink," were obtained from two matched samples in Nigeria, allowing cross-magazine comparisons within a single country. A discriminant analysis using the 11 evaluation scales as the discriminating variables was carried out for each of the four data sets to identify the linear combination of the evaluation scales that would maximally discriminate between regular and occasional readers. A large number of attributes did not discriminate between regular and occasional readers in any of the studies. Only three attributes--impartiality, accuracy, and visual attractiveness--were present in at least three of the four derived functions. Although statistically significant, these functions were able to improve prediction of readership only 14% to 17% above chance in a classification analysis. (Author/FL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED168050

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Magazine Division

MAGAZINE EVALUATIONS AND LEVELS OF READERSHIP: A CROSS-CULTURAL ANALYSIS

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J. David Johnson
Albert R. Tims

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

J. David Johnson
University of Wisconsin-Milwaukee
Milwaukee, Wisconsin

Albert R. Tims
International Communication Agency
Washington, D.C.

Paper Presented to the Magazine Division,
Association for Education in Journalism Annual Convention,
Seattle, Washington, August 1978

C S204 755

These data were originally collected by the Media Research Division, Office of Research, U.S. Information Agency.

Magazine Evaluations and Levels of Readership:
A Cross-Cultural Analysis

Nearly twenty years has passed since Jack Lyle (1960) first published a set of semantic differential scales for measuring reader attitudes. During this period, such scales have been used repeatedly to profile the attributes that make up a publication's image. That publishers have concerned themselves with how readers perceive their publications should not be particularly surprising. Consider, for example, the understandable concern of a news magazine publisher to discover that readers, or at least potential readers, don't find the magazine particularly accurate, authoritative, or timely. This kind of information could have a tremendous impact on editorial decision making.

In gathering such information and then using it to make editorial decisions certain assumptions are implicit. The most important of these assumptions, that reader evaluations are important determinants of readership, is the subject of this paper. Using the same semantic differential scales described above, we have addressed two basic questions. Are we justified in the basic assumption that reader perceptions of a publication influence readership in significant ways? And if so, are certain attributes more important than others?

To answer these questions, we set up an analysis to test the image attributes in combination to see how well they could predict whether an individual is a regular or only occasional reader. The statistical technique selected for this purpose was a discriminant analysis (Cooley & Lohnes, 1971). This approach allows us to answer the key question of how important "image" is as a determinant of readership and identify the relative importance of each image attribute.

METHOD

Background

The data for this analysis are drawn from four separate studies of elites in three developing countries who receive magazines published by the United States Information Agency (now International Communication Agency). Appendix I gives a breakdown of the characteristics of each sample by readership, occupation, education, and age.

Publications

Three different magazines were included in the analysis. All of the publications are of high quality, in full color, and feature reprinted articles from leading publications, commissioned articles by major writers, and photographic essays.

Topic magazine is a general interest publication containing mainly articles about the United States and Africa.

Horizons, also a general interest magazine, is distributed worldwide (except in the United States) and generally carries feature length articles describing social, cultural, historical, and technological experiences and events in the United States.

Interlink magazine is published exclusively in Nigeria and is oriented toward discussion of U.S. experiences directly relevant to Nigeria.

Design

Evaluations of Horizons magazine were gathered from random samples of elites in Venezuela and in the Philippines; providing an excellent opportunity to assess the cross-cultural replicability of patterns in the evaluations made by readers of the magazine.

Evaluations of Topic magazine and Interlink magazine were obtained from two matched samples of elites in Nigeria, allowing cross-magazine comparisons within a single country. These unique data provide an outstanding basis for generalizing the findings to broader settings, because of the cross-national and cross-cultural replications.

Evaluation Scales

Subjects in each of the samples were administered the same set of eleven evaluative scales (see Table 1). All are of the bi-polar adjective (semantic differential) type, using an eleven point interval. Only those respondents who reported that they read the publications at least "on occasion"

were asked to evaluate the magazines, since it was assumed that non-readers would have no firm basis for making evaluations.

Analysis

A discriminant analysis (Cooley & Lohnes, 1971) using the eleven evaluation scales as the discriminating variables was carried out for each of the four data sets. The purpose of this analysis was to identify the linear combination of the evaluation scales which would maximally discriminate between regular and occasional readers.

The analysis yields a discriminant "function" to which each of the scales contribute. The size of each scale's contribution to the function indicates which attributes best define the differences in the way the publication is viewed by regular and occasional readers. Predicted readership, made on the basis of the discriminant function, is compared to known readership to test the ability of the image attributes to account for levels of readership.

RESULTS

The average ratings on the eleven image attributes in each of the four data sets are presented in Table 1. All publications were rated positively on each attribute.

Discriminant Analysis

Table 2 presents the results from the discriminant analyses. A stepwise selection process for including items in the discriminant function was used so that only items with good discriminating power are included. The coefficients shown in section A of Table 2 represent the relative contribution of each image attribute to the discriminant functions. These coefficients may be thought of in much the same way as beta weights in regression analysis in so far as magnitude of the contribution (association) is gauged by the size of the coefficient irrespective of the sign.

The table clearly shows that a large number of the attributes did not discriminate between regular and occasional readers in any of the studies. It also reveals that several attributes contributing to the function in one study do not show up as important in any of the others. In total, eight of the eleven attributes fall into one of these two categories. The three remaining attributes (impartiality, accuracy, and visual attractiveness) are present in at least three of the four functions.

The canonical correlations[1] between the discriminant funtions and readership were statistically significant ($p <$

[1]The correlation between the set of variables defining the "function" and the variable defining readership group membership. With only two groups this is actually a multiple correlation.

.01) ranging from .24 to .32. Although these relationships are statistically significant the total amount of variance accounted for is relatively small (from 5.8% to 9.9%).

The group centroids (means) describe the location of the readership groups (e.g., regular and occasional readers) along the standardized discriminant function. Both of the studies involving Horizions magazine show quite large differences while the studies in Nigeria show only marginal differences as judged by the significance tests shown in section E of Table 2.

Classification Analysis

Results from tests of the ability of the discriminant functions to distinguish between regular and occasional readers are shown in Table 3. The test is a simple comparison of actual readership and predicted readership.

On the average the discriminant functions were able to classify from 64 per cent to 67 per cent of all readers correctly. By chance 50 per cent of the readers would be classified correctly, thus the functions were able to improve prediction of readership from 14 to 17 per cent above chance.

DISCUSSION

In general, the results show that several image attributes of these publications can be used to discriminate between regular and occasional readers and thus may be important.

However, in absolute terms, their predictive power was not shown to be exceedingly strong (14 to 17% above chance). These findings suggest that while image is a factor in readership, there are quite likely other factors that play a more important role.

Nevertheless, the attributes that emerged from these analyses make good intuitive sense. The finding that the impartiality of these magazines is rated differently by regular and occasional readers is the best example. If the magazines had been perceived as vehicles for the United States to distribute biased points of view, then elites in foreign countries would understandably be less likely to read them. Accuracy can be explained along a similar vein.

Given the editorial stress on the visual aspects of these publications, it also seems logical that visual attractiveness would make a difference in readership.

IMPLICATIONS

This study has identified three distinct magazine attributes that statistically discriminate between regular and occasional readers. However, it has not shown these attributes to be particularly powerful determinants of readership. In this light, the question we must address is the potential ability of "other" factors to explain readership. Tradi-

tionally, these factors have been classified into three distinct categories; characteristics of the medium, characteristics of the individual, and chacteristics of the situation. Although the available data do not allow us to examine these factors empirically, certain implications are suggested by the findings.

A decision to expose oneself to a medium may involve the conscious or unconscious weighing of a number of different factors. One of these, perceptions of the characteristics of the medium, was the topic of this study. Others, for example, include the individual's motivations and expected gratifications (characteristics of the individual) and the availability of other media (characteristics of the situation). These factors represent major elements in a decision making process.

In this study, even though a level of exposure had already been establishied, as defined by at least occasional readership, we expected perceptions of the medium would be a strong determinant of readership. However, as discussed above, this expectation was not generally confirmed. This finding can be interpreted in at least two different ways. The first is to conclude that the way individuals perceive a medium has very little to do with whether of not they use it. This still seems quite unlikely. The second interpretation is to suggest that

these perceptions are indeed important, but not in determining whether a person will be a regular or occasional reader. It can be argued that these kinds of evaluations are much more important as part of the basic decision of whether to expose oneself at all to the medium. In other words, such evaluations are most important after the individual is aware of the medium in determining whether to read (regular or otherwise) or not. Once this basic decision has been made other factors, such as the availability of time and the information needs of the individual, become much more important.

We have outlined a two step process where perceptions of the medium operate initially in determining who will be readers and who will be non-readers. Beyond this point, we propose that readership is in large measure governed by the kinds of situational and individual factors mentioned above.

To test these hypotheses future studies will not only need to tap possible situational determinants and motivational characteristics of the individual, but also extend the measurement of "image" attributes to include individuals aware of the medium but who are not readers. It must be assumed that these "aware non-readers" have made some type of evaluation in making their decision not to use the medium. By exploring the evaluations of these persons we suggest future research will be in a much better positions to unravel the role of "image" in media use.

References

Cooley, W. and Lohnes, P. Multivariate Data Analysis, New York: Wiley, 1971.

Lyle, J. "Semantic differential scales for newspaper research," Journalism Quarterly, Vol. 37, No. 4, 1960, pp. 559-562.

TABLE 1

MEANS FOR EVALUATIVE DIMENSIONS FOR THE FOUR STUDIES*

	Venezuela Horizons	Philippines Horizons	Nigeria Interlink	Nigeria Topic
Accurate - Inaccurate	8.4	7.2	7.2	7.0
Authoritative - Not authoritative	8.8	7.3	7.2	7.1
Impartial - Prejudiced	6.9	6.0	6.3	6.3
Well intentioned - Questionable intentions	7.7	6.8	6.5	6.6
Timely - Dated, old	8.1	7.2	6.7	6.7
Important to me - Unimportant to me	7.9	6.2	6.0	6.3
Thought provoking - Bland	7.5	6.9	6.6	6.6
Relevant - Irrelevant (to own interests)	7.1	6.5	6.0	6.3
Visually attractive - Unattractive	9.6	8.0	7.0	7.4
Credible - Not credible	8.1	6.9	6.9	7.0
Best magazine of its kind - Worst magazine of its kind	8.5	7.1	6.6	6.8

*All means are based on a 11 point scale ranging from zero (negative) to ten (positive).

TABLE 2

DISCRIMINANT ANALYSIS FOR THE FOUR STUDIES

A.	Loading of Evaluative Dimensions on Discriminant Functions	Venezuela Horizons	Philippines Horizons	Nigeria Interlink	Nigeria Topic
	Evaluative Dimension				
	Impartial	.21	.60	-.82	.49
	Accurate	-.32	-.74	*	-.76
	Attractive	-.21	*	.41	-.59
	Authoritative	*	*	.84	.44
	Important	-.46	*	*	*
	Relevant	*	-.66	*	*
	Well intentioned	*	*	-.48	*
	Credible	*	*	*	.75
	Timely	*	*	*	*
	Thought provoking	*	*	*	*
	Best of its kind	-.41	*	*	*
B.	Canonical Correlation	.32	.24	.25	.24
C.	Group Centroids				
	Occasional readers	.49	.55	.26	.28
	Regular readers	-.20	-.10	-.24	-.20
D.	Chi Square	34.3	12.3	9.7	8.3
E.	P <	.0001	.007	.04	.14

*Deleted from discriminate function due to insufficient discriminating power.

TABLE 3

CLASSIFICATION ANALYSIS FOR THE FOUR STUDIES

	Predicted		Average
Philippines Horizons	Occasional	Regular	% Correct
Occasional	57.6%*	42.4%	67%
Regular	31.3%	68.7%	
Venezuela Horizons			
Occasional	62.2%	37.8%	
Regular	34.7%	65.3%	64.4%
Nigeria Topic			
Occasional	67.7%	32.3%	
Regular	37.9%	62.1%	64.4%
Nigeria Interlink			
Occasional	72.6%	27.4%	
Regular	41.8%	58.2%	65.1%

*This figure represents the percentage of actual occasional readers which the discriminant function correctly classified.

APPENDIX I.

Table A: Sample Size and Number of Occasional and Regular Readers

	Sample Size	Regular Readers	Occasional Readers
Philippines Horizons	709	179 (25%)	33 (5%)
Venezuela Horizons	500	236 (47%)	98 (20%)
Nigeria Topic	242	87 (36%)	62 (26%)
Nigeria Interlink	237	79 (33%)	73 (31%)

Table B: Age of Respondents

Age	Philippines Horizons	Venezuela Horizons	Nigeria Topic	Nigeria Interlink
29 or under	19%	7%	9%	7%
30 to 49	48	66	70	78
50 or older	32	27	22	14
Total	99%	100%	101%	99%

Table C: Education of Respondents

Education	Philippines Horizons	Venezuela Horizons	Nigeria Topic	Nigeria Interlink
Secondary or less	7%	8%	15%	15%
Some university	—	26	17	9
Completed univ.	41	39	32	35
Graduate study	52	27	25	26
Trade, technical, or vocational	--	--	12	14
Total	100%	100%	101%	99%

Table D: Occupational of Respondents

Occupation	Philippines Horizons	Venezuela Horizons	Nigeria Topic	Nigeria Interlink
Government	22%	26%	28%	29%
Academic	34	28	26	27
Media	19	18	13	12
Security/Defense	3	--	5	3
Civic Leaders	2	--	--	1
Labor	2	--	1	3
Business	10	10	21	22
Professionals	3	8	5	3
Artisits/Writers	5	--	--	--
Others	--	10	--	--
Total	100%	100%	99%	100%